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THE ECONOMIC EFFECT OF DEPARTMENT OF  
DEFENSE EXPENDITURES ON THE PHILADELPHIA  
INDUSTRIAL AREA: AN ANALYSIS

by

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## CHAPTER I

### INTRODUCTION

#### Subject and Scope of the Study

On December 21, 1963, President Johnson issued a memorandum establishing the Committee on the Economic Impact of Defense and Disarmament. In that document, he called attention to the economic importance to communities of defense expenditures and the need for a more thorough study of the impact of those expenditures. He wrote, in part:

The Committee will be responsible for the review and coordination of activities in the various departments and agencies designed to improve our understanding of the economic impact of defense expenditures and of changes either in the composition or in the total value of such expenditures.

Federal outlays for defense are of such magnitude that they inevitably have major economic significance. In certain regions of the Nation and in certain communities they provide a significant share of total employment and income. It is; therefore, important that we improve our knowledge of the economic impacts of such spending, so that appropriate actions can be taken - in cooperation with state and local governments, private industry, and labor - to minimize potential disturbances which may arise from changes in the level and pattern of defense outlays.<sup>1</sup>

It does not take much research to see that there is a firm foundation for the President's concern. During fiscal

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<sup>1</sup>Report of the Committee on the Economic Impact of Defense and Disarmament to the President of the United States, Gardner Ackley, Chairman, (Washington, D. C.: Government Printing Office, 1956), p. iv.



year 1969, it is estimated that the total administrative budget for the Defense Department will be in excess of eighty-seven billion dollars.<sup>2</sup> Much of that money will be spent for wages within the Department. In 1967, for example, the Defense Department employed 2.97 million people. That represented 5.2 per cent of all persons employed in the United States.<sup>3</sup> However, over thirty-seven billion dollars will be expended on programs more directly related to the civilian industrial complex. Those programs will include procurement, construction, housing, civil defense, and other defense-related activities. The range of items purchased will extend from safety pins to ballistic missiles. Some of those items will be purchased on the open market in much the same manner as any other large purchaser would buy. Other items, such as aircraft, will be manufactured to exacting government specifications by private contractors. Still other items will be manufactured in installations owned and operated by the Defense Department such as the Frankford Arsenal in Philadelphia, Pennsylvania.

An organization which involves that many people and expends that amount of money in such a wide market could not operate without influencing the economy in several ways. It creates primary and secondary employment; influences the actions of some industries; imposes restrictions; and, in the event of a major cutback in expenditures, it could dampen

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<sup>2</sup>U. S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 89th ed., 1963, p. 248.

<sup>3</sup>Ibid., p. 251.





the economy in general.

The effects of such economic influence can be both bad and good. At times, the differentiation between the two is a matter of individual opinion. Hitch and McKean, in The Economics of Defense In the Nuclear Age, point out some of those effects.<sup>4</sup> In their opinion, the public benefits from the spillovers to the private sector from research and development work carried out in connection with military projects; from sea and air navigational aids; from highway building for military purposes; and, from ship and aircraft construction which reduces the cost to private concerns for those items because of savings to scale in production within those industries. Some of the bad effects which they see are: increased taxes, inflationary pressures, and the reduction of competition in some industries.

Hitch and McKean's opinions and much of their book appear to be outdated. No longer is there the pretense of highway construction for military purposes or the establishment of air and sea lanes primarily for the use of the armed forces. The expansion of American involvement in Vietnam and a corresponding increase in defense expenditures, since the book was written, also tend to outdate it. A very thorough, up to date analysis of the economic effects of defense expenditures is available in two Volumes which contain a report of hearings before the Joint Economic Committee of

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<sup>4</sup>Charles J. Hitch and Roland N. McKean, The Economics of Defense In the Nuclear Age, (Cambridge, Massachusetts: The Harvard University Press, 1963), pp. 69-81.



Congress concerning the military impact on the American economy now and after the Vietnam war.<sup>5</sup>

Of particular importance in that report are the articles and papers compiled as background material for the hearings and contained in Volume II. Those articles present various opinions on the impacts of defense-related employment, regulations imposed on industries, post-Vietnam defense programs and their possible effects, and case studies of areas which have been affected in the past by changes in defense expenditures.

As some of the material presented to the Committee indicates, the economic benefits and problems associated with defense expenditures are more likely to be local and regional than national in scope.<sup>6</sup> Some sections of the country are heavily industrialized and others have little industry. Small, relatively isolated, industrialized towns are more likely to feel the ups and downs of changes in defense expenditures, if they share in them, than a larger, more diversified, industrial area. States such as California and Texas have large proportions of our military forces stationed within them; thus, benefiting from the attendant military and civilian salaries and local buying for support of the bases. Other states have little or no share of the total military forces stationed within them. As defense plants are opened or expanded in a

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<sup>5</sup>U. S. Congress, Joint Economic Committee, Economic Effect of Vietnam Spending, 90th Congress, 1st Session, Volumes I and II.

<sup>6</sup>Chamber of Commerce of the United States, Report by the Committee on Economic Policy on the Economics of Defense Spending, (Washington, D. C.: Chamber of Commerce, 1965), p. 265.



community more jobs are created, more local buying power is available, and more private and public goods and services are demanded. With a cutback in expenditures, a readjustment may involve a large part of the community unless other employment is made available to take up the slack. The same factors which may create the necessity for readjustment in one community may cause a boom in another community at the same time (e.g., a cutback in armored car production in Philadelphia, Pennsylvania and a simultaneous increase in nuclear submarine production in New London, Connecticut might result from a shift in emphasis from conventional warfare to strategic warfare). In such a case, the nation as a whole may be no better or no worse off; but, the two communities have fared very differently. For this reason, it was decided to narrow the geographical scope of this study to one area.

The selected scope includes an area that is industrialized; that is large enough to play a significant part in the economy of the nation; and, that receives a reasonable amount of defense expenditures. An area of Pennsylvania centered around Philadelphia was chosen because it seemed to meet those conditions. The area consists of: the City of Philadelphia, Montgomery County, Delaware County, Chester County, and Bucks County (Appendix I). Those political subdivisions are the Pennsylvania section of the Delaware Valley industrial complex. One county in Delaware and eight counties in New Jersey complete the complex. Although Philadelphia and the thirteen counties are interdependent and would make an interesting study of a tri-state industrial





community, New Jersey and Delaware are not considered in this project, except in some cases where statistics could not be isolated for the Pennsylvania section alone. The Pennsylvania area provides a sufficiently varied mixture of industries without getting into the problems of interstate commerce and cooperation. In addition to already stated reasons for selecting this area for study, it is noteworthy that the State of Pennsylvania, in which Philadelphia is the major city, was one of several states which, in 1966, received defense contracts at rates 40 to 50 per cent above the previous year's level.<sup>7</sup> This indicates that its economy was probably influenced in some manner by buildups for the Vietnamese war and it raises the question of what the effects of a cutback after the war will be.

#### Research Questions and Source of Material

The basic question with which this paper is concerned is: How do Department of Defense expenditures influence the economic environment of the Philadelphia area? This is, in reality, a dual question. To answer it, consideration was given to both the monetary effects and the restrictive or regulatory effects of Defense Department expenditures. The primary effects on defense-oriented industries and the secondary effects on the community were also considered.

The following related questions were also examined

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<sup>7</sup>The Center for Strategic Studies, Economic Impact of the Vietnam War, Special Report Series Number 5, (Washington, D. C.: Renaissance Editions, Inc., 1967), p. 48.



in order to provide a comprehensive analysis of the basic question:

1. How large and how diversified is the Defense Department's spending program in relation to the procurement of goods and services from the industrial sector of the economy? The industrial sector, in this case, included civilian industries, non-profit organizations which received defense contracts, and government owned installations in the area which are primarily dependent on civilian employment vice military personnel.

2. What statutory and other regulations govern Defense Department contracting and how are they applied?

3. How is the bureaucracy of the Department of Defense organized to do business with the industrial sector, and how does that organization relate to appropriate civilian institutions?

4. What effects do Defense Department expenditures have on a specific industrial complex?

5. What is the outlook for the effect of future Defense Department spending policies on the area under study?

Research into the above questions was intended to result in an evaluation of the defense-industrial-civic relationship in the specific area studied and the circumstances which foster that relationship. In order to provide a background for the study and to determine the opinions of local civic and business leaders about the subject,



110 questionnaires were prepared and sent to various organizations in the Philadelphia area. Copies of the questionnaires and accompanying letters are attached to this study as Appendixes III through VI. The recipients of the questionnaires were divided into four groups: civic organizations, major defense contractors with contracts worth more than ten million dollars annually, companies which were likely sub-contractors or suppliers, and major companies which were not defense-oriented in any way. The number of returns was disappointing but the quality was good. The comments received with them were written by men who were in various management positions in some of the largest firms in the Philadelphia area. Those firms represented a reasonable cross section of types of companies. For example, returns were received from banks, a steel mill, an advertising agency, department stores, an aero-space company, construction companies, electronic companies, and a chemical company. The results of the survey are contained in Chapter IV.

Other material used included: an economic input-output model of the area provided by the National Aeronautics and Space Administration, defense contract policies provided by the procurement section of Headquarters, U. S. Marine Corps, information on the Defense Department's procurement organization from the Defense Documentation Center, publications of the U. S. Department of Commerce, and publications of the Departments of Commerce of the State of Pennsylvania and the City of Philadelphia. Books and periodicals cited





in the study and included in the bibliography were obtained from the libraries at the George Washington University and the Marine Corps Educational Center, Quantico, Virginia.

### Organization of the Study

In order to provide a background for this study, Chapter II will deal with the procurement organization within the Defense Department and how it interacts with other government organizations and with industries. Chapter III will explore some of the more important regulations surrounding the procurement process and their effects on industry and the community in general.

Chapter IV will continue to establish background information; but, it will center on Delaware Valley, Pennsylvania. It will establish the economic condition of the area as reflected in its location, population, industries, and financial condition.

Chapter V will analyze the effects of defense expenditures in the geographical area of concern. It will examine both the monetary value of such expenditures, and the restrictions which may be imposed through defense contracts. Those aspects will be viewed with respect both to their effects on the industries concerned and on the community as a whole.

Chapter VI attempts a look into the future. It examines the prospects of government influence in the economy through new management techniques and through presently



established aid to offset adverse effects of changes in the emphasis of government expenditures. In conjunction with the latter point, the question of the nature and extent of cutbacks or changes in defense expenditures is also examined.

Chapter VII closes the paper with a summary of the major points covered in the other chapters.



## CHAPTER II

### ORGANIZATION OF THE DEFENSE DEPARTMENT: PROCUREMENT

#### Internal Organization

The Defense Supply Agency (DSA), through its subordinate units, has the responsibility within the office of the Secretary of Defense for the coordination of the procurement of goods and services for all elements of the Defense Department. In addition, the DSA administers defense-wide programs for cataloging, material utilization, surplus disposal, and management of technical data.

Table 1 shows the organization and staffing of DSA. Because DSA is, in effect, a support agency for all the armed forces, the military personnel positions in the agency are staffed on the basis of balanced military service representation and are rotated among the services. Military authorization by service as of June 30, 1966 was: Army, 36 per cent; Navy, 29 per cent; Air Force, 33 per cent; and, Marine Corps, 2 per cent.<sup>8</sup> DSA's position within the Department of Defense is shown in Appendix II.

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<sup>8</sup>U. S. Department of Defense, Annual Report for Fiscal Year 1966, (Washington, D. C.: Government Printing Office, 1967), p. 110.





TABLE 1

## DSA ORGANIZATION AND MANNING LEVEL (JUNE 30, 1966)

	<u>Civilian</u>	<u>Military</u>	<u>Total</u>
Headquarters	1,031	146	1,177
Field Extension Offices	595	17	612
Service Centers			(2,565)
Defense Documentation Center (DDC)	477	4	481
Defense Logistics Service Center (DLSC)	1,116	9	1,125
Defense Industrial Plant Equipment Center (DIPEC)	489	1	490
Defense Supply Agency Administrative Support Center (DSASC)	424	45	469
Defense Contract Administration Regions			(20,974)
Philadelphia	2,351	45	2,396
Detroit	1,181	19	1,200
Dallas	925	41	966
Boston	2,748	42	2,790
Cleveland	1,610	26	1,636
Atlanta	1,519	49	1,568
Chicago	2,026	30	2,056
St. Louis	1,427	27	1,454
New York	3,004	53	3,057
Los Angeles	2,790	46	2,836
San Francisco	994	21	1,015
Defense Depots			(9,711)
Mechanicsburg	1,843	28	1,871
Memphis	2,059	23	2,082
Odgen	3,306	21	3,327
Tracy	2,416	15	2,431
Defense Supply Centers			(21,941)
Construction	5,082	59	5,141
Electronics	3,738	44	3,782
Fuel	171	18	189
General	2,976	62	3,038
Industrial	2,740	43	2,783
Personnel	6,813	195	7,008
TOTAL	55,851	1,129	56,980

SOURCE: U. S. Department of Defense, Annual Report for Fiscal Year 1966, (Washington, D. C.: Government Printing Office, 1967), p. 111.



For the most part, DSA uses appropriated Operations and Maintenance funds (O&M) and Research, Development, Test and Evaluation funds (RDT&E) to pay costs other than military personnel costs; plus, a stock fund to finance inventories. DSA's share of the O&M defense agencies' appropriation for fiscal year 1966 was \$436.2 million. Additional funds of \$33.4 million were received from the military departments so that the total DSA operation cost for that year amounted to \$469.6 million. During the same year, DSA centrally managed 1,338,800 line items. It had a net inventory investment of \$1.99 billion and annual sales of \$2.92 billion.<sup>9</sup>

#### Relations With Other Government Agencies

As an organization within the Defense Department, DSA is integrally related to the armed services. In carrying out its responsibilities towards them, it provides them with certain services such as pre-award surveys, review of contractor purchasing systems, quality assurance and inspection, property administration, production surveillance and reporting, payments to contractors, industrial security, and other functions required in connection with industry performance on defense contracts. Responsibility, for initial award of contracts and all decisions as to the nature and quantity of items and services to be purchased, remains with the buying service. DSA, through the Defense Contract Administration

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<sup>9</sup>Ibid., p. 473.



Service, performs those contract administration functions that can best be handled at or in close proximity to the contractor's plant. In addition to retaining responsibility for contract awards, the individual military services are responsible for the administration of certain contracts which do not come under the cognizance of DSA and for contracts in specific plants assigned to them by the Defense Department.

The DSA provides the same types of services to National Aeronautics and Space Administration (NASA); to the purchasing offices of other federal agencies when it is in the best interests of the government to do so; and, at times, to foreign governments. During fiscal year 1966, DSA also was made responsible for all logistic functions in support of the national civil defense program. Assigned functions included the development of material and budget requirements for the Office of Civil Defense and accounting for civil defense material.

The DSA, by the nature of its mission, must have a closely coordinated working relationship with several federal agencies outside the Department of Defense. It cooperates with the Department of Commerce in the administration of the Priorities and Allocations Program and the Small Business Set-aside Program. It works with both the Commerce Department and the Labor Department in administering the Labor Surplus Area Set-aside Program. It cooperates with the General Services Administration in the disposal of surplus property and in the development of an integrated Automatic



Data Processing cataloging system: a current project.

The United States Coast Guard obtains a full range of items through DSA, while the Veterans Administration and the Public Health Service obtain medical items. The Federal Aviation Agency purchases electronic tubes, and the Office of Economic Opportunity (Job Corps) has been requisitioning clothing, subsistence items and designated items of general supply through the DSA.

### Relations With Industry

As might be expected from the mission and organizational structure of DSA, the Defense Department's relationship with industry varies from that of a provider of technical assistance and services to that of policing contract performance. DSA, through the Defense Documentation Center (DDC), provides classified and unclassified management information services, without charge, to contractors engaged in government research and development programs. In carrying out this mission, the DDC maintains a Research, Development, Test and Evaluation (RDT&E) work unit data bank. This is a bank of data concerning on-going research and is maintained as a complement to an Automatic Data Processing documentation system for completed research projects. DDC also makes available to appropriate contractors, foreign technical reports and DOD sponsored scientific and technical information.

The Defense Industrial Plant Equipment Center (DIPEC) has the primary responsibility for the development





and maintenance of central records of the DOD inventory of industrial plant equipment and the management of idle equipment. Some of that equipment is earmarked for mobilization requirements and, as such, can not be allocated to industry or to government industrial activities. Other than the mobilization reserve; however, such equipment is available for distribution to defense contractors and certain other specified activities (e.g., vocational schools under the terms of Public Law 883) and for redistribution when necessary.<sup>10</sup> DIPEC not only provides services to industry, it also regulates. It requires reports of contractors as to equipment utilization; it sets standards of utilization; and, it can redistribute equipment in order to effect better utilization.

Other aspects of DOD's relations with industry may be viewed in conjunction with DSA's responsibilities towards the armed services as discussed above. DSA provides trained quality assurance personnel to monitor production. It also monitors the safety aspects of contractors facilities as they pertain to government contracts. Contract delinquency is closely observed and, in certain cases, visits may be made to the managers of delinquent plants by regional administrators of the Defense Contract Administration Service (DCAS) to emphasize the importance of timely deliveries, and, to assist the contractors in attempting to reduce their delinquencies.<sup>11</sup> Other aspects, of the DOD-industrial

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<sup>10</sup>Ibid., p. 107.

<sup>11</sup>Ibid.



relationship, stem from public laws and armed services contract regulations. They are more appropriatly discussed in Chapter III.



### CHAPTER III

#### REGULATIONS GOVERNING DEPARTMENT OF DEFENSE EXPENDITURES

##### Statutory

In procuring goods and services, the Defense Department is guided and obligated by laws which have been passed by Congress and, from which, the Department's own regulations evolve. When DOD enters into an agreement with a contractor it accepts the responsibilities of determining which laws apply to the particular contract and also of enforcing those laws. The contractor agrees to abide by the conditions of the contract and to accept whatever benefits or restrictions are embodied in the laws pertaining to the contract. This section will discuss some of the statutory regulations which are commonly involved in defense contracts. The effects of those regulations in the Philadelphia area are discussed in Chapter V.

##### The Buy American Act of 1953

This act, implemented by Executive Order 10582, issued on December 17, 1954, provides that the federal government may buy supplies manufactured only in the United States for use in the United States unless such purchases are inconsistent with the public interest or the cost is



unreasonable.<sup>12</sup> The act also prohibits the use of foreign materials or supplies in United States construction to be performed in the United States, but the prohibition does not apply when the supplies to be used are not produced in the United States "in sufficient and reasonably available commercial quantities and of satisfactory quality." Under the provisions of this act, bids which undertake to perform a contract using American materials or supplies, will be favored by as much as a 6 per cent differential in price over bids which anticipate using foreign materials or supplies.

#### The Small Business Act of 1958

This act states that it is to be the policy of Congress that:

a fair proportion of the total purchases and contracts or subcontracts for property and services for the government .<sup>13</sup> . be placed with small business enterprises . . .<sup>13</sup>

The act defines a small business concern for purposes of government procurement, as one which, including its affiliates, is independently owned and operated, is not dominant in the field of operations in which it is bidding on government contracts, and can qualify under additional criteria set forth in the regulations adopted by the Small Business Administration. This definition is reiterated in

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<sup>12</sup>Buy American Act, secs. 10(a) - 10(b), Vol. VIII, (1933).

<sup>13</sup>Small Business Act, Vol. III, secs. 631 et seq., 72 Stat. 348, (1958).





the armed Services Procurement Regulations.

There are three main aspects of the Small Business Act: (1) When a fair and reasonable price can be negotiated, individual procurements, or classes of procurements, or portions of procurements can be set aside by the procuring agency for exclusive small business participation. (2) Under the Certificate of Competency Program, the Small Business Administration may attest to the capacity and credit of a small business concern to produce on time and in the quantity and quality required. The objective of this program is to counter the tendency of contracting officers to reject the bids of small firms, even if they were the lowest bids received, on the grounds that they lacked the capacity to perform the contract. Certificates of competency are binding on the procuring agencies. (3) The Small Business Subcontracting Program requires that, in all prime contracts and subcontracts over \$500,000, a clause be inserted that requires the contractor or subcontractor to take positive action in soliciting small business subcontracts.

During fiscal year 1966, the Defense Department awarded \$7.6 billion out of a total of \$34.8 billion in prime contracts to small businesses. Small businesses also received 41.8 per cent of the subcontracts reported by the large defense contractors who participated in a voluntary subcontracting program.

The Defense Production Act of 1950 (as amended)

Under Title I, of this act, the President is



authorized to establish priorities in the performance of contracts or orders necessary to promote the national defense, and to require the acceptance and performance of such contracts or orders for the purpose of assuring such priorities.<sup>14</sup> He is also authorized, under the same Title, to allocate materials and facilities for the purpose of promoting the national defense. The term "national defense" is defined in the Defense Production Act as:

programs for military and atomic energy production or construction, military assistance to any foreign nation, stockpiling, and directly related activity.

Priorities are assigned to prime contracts by defense agencies. Such an assignment requires the contractor to place the priority information on his subcontracts and purchase orders which he may place in order to complete the prime contract. The subcontractors or suppliers must then give preference to that order. Identification and use of priorities, once assigned, is required throughout as many tiers of subcontractors and suppliers as may be required to complete performance on the contract.

Allotments are made in terms of eight categories of controlled materials as follows:

1. Carbon steel (including wrought iron).
2. Alloy steel (except stainless steel).
3. Stainless steel.
4. Copper and copper-base alloy brass mill products.

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<sup>14</sup>Defense Production Act Amendment, Vol. II, sec. 2061, (1950).



5. Copper wire mill products.
6. Copper and copper-base alloy brass mill products.
7. Aluminum.
8. Nickel alloys.

Allotments, like priorities, are assigned to the contract. The contractor is accountable for the materials made available under the allotment system and must maintain records showing the disposition of those materials.

A third major provision of the Defense Production Act of 1950 is a category of defense orders known as rated orders. Rated orders require involuntary participation in production deemed necessary by the Defense Department if no other method of fulfilling an order is feasible. While the objective is to force necessary production, conditions do exist where a supplier can not be required to comply. Regulation Number 2, of the Business and Defense Services Administration, provides certain rights to the potential supplier. He may refuse to accept a rated order when:

- (1) his established price and terms of sale can not be met;
- (2) he can not make the item without substantially altering or adding to his facilities;
- (3) when compliance would stop or interrupt the supplier's operations for the next sixty days in such a way as to cause a substantial loss of total production or substantial delays in operations.

Enforcement of rated orders has taken place in support of the war in Vietnam. On October 19, 1965, Major General Oliver C. Harvey, at a press conference held in



Washington, D. C. incident to the Defense Supply Association's national convention, indicated that apparel producers would have to respond voluntarily to the increased military clothing needs or face the possibility of rated orders. Apparently that warning went unheeded; because, on December 17, 1965, the provisions of the act were invoked against several potential suppliers to force production of over one million pairs of cotton trousers.<sup>15</sup>

#### The Renegotiation Act

The first time that the government seriously decided to try to stop wartime profiteering was in the years after World War I.<sup>16</sup> The Justice Department brought suit during that time against the Bethlehem Steel Company because of what the government considered to be excessive profiteering in the construction of ships during the war. The contract for those ships provided that the company would be paid costs, plus a profit, plus one half of any savings in estimated costs. The government contended that the extra payment clause provided grossly excessive profits and was therefore void. The Supreme Court (United States v. Bethlehem Steel, 1942) upheld the contractor and said in part:

if the Executive is in need of additional laws by which to protect the nation against war profiteering,

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<sup>15</sup>Lewis L. Marshall, "Procurement: A Unique Challenge," Quartermaster Review, XLVI, (July-Augues, 1966), p. 23.

<sup>16</sup>Renegotiation Act, Vol. II. sec. 1211, (1951).





the Constitution has given to Congress, not to this court, the power to make them.<sup>17</sup>

While it is true that the government lost that case, the work put into it was not wasted. It attracted the attention of Congress and on April 28, 1942, the first Renegotiation Act was passed as a wartime measure. The act established a national policy of eliminating excessive profits derived by prime and subcontractors from defense contracts.

Under the provisions of that act, all contractors who agree to a renegotiation clause in a defense contract (it is usually necessary to agree to such a clause in order to get the contract), must submit reports of profits earned under all such contracts during a fiscal year. The total of such profits is considered in determining whether excessive profits were earned, and an attempt is made to recoup that amount. Using this procedure, the government recovered \$11 billion gross from World War II contracts.<sup>18</sup>

The wartime Renegotiation Act expired on December 31, 1945, but was reinstated, in part (covering aircraft and aircraft accessories contracts), in 1948. By 1950, coverage had been expanded to cover most items. On January 1, 1951, a new Renegotiation Act was passed, and it is in effect today. Essentially, it is the same as the 1942 act,

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<sup>17</sup>United States V. Bethlehem Steel Company, 315 U. S. 289, (1942).

<sup>18</sup>Charles H. Swayne, "Statutory Renegotiation and Profit Control," Lecture given at the Industrial College of the Armed Forces, Washington, D. C., December 19, 1957.



but new administrative features were introduced. Responsibility for implementing and enforcing the law was vested in the Renegotiation Board, an independent body composed of five members appointed by the President and confirmed by the Senate.

In computing costs, the government may exercise the right to select and reimburse only those costs which it considers applicable to, and necessary for, the performance of its own work. Many services which are necessary to support operations are not considered by the government as costs. Examples are the operation of a cafeteria and contributions to a local charity. In 1962, out of 3,000 defense contracts reviewed for negotiation, 1,000 lost money on the contracts if those costs are considered.<sup>19</sup>

#### Public Law 87-653

This law amends Chapter 137, of Title 10, U. S. Code, relating to procurement. It contains two basic points: (1) modifications to the requirements for formal advertising of contracts and the procedure for negotiation of contracts and (2) certification of costing data by contractors and subcontractors.<sup>20</sup>

The first point concerns normal contracting procedures and is of little value to this study. The second point; however, can cause economic repercussions which

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<sup>19</sup>Ibid.

<sup>20</sup>Armed Forces Procurement Act Amendment, Statutes at Large, LXXVI, sec. 70A, (1962).



could be detrimental to a company and possibly to a community if the company is large enough to have a significant economic influence in the area. For that reason, part of the law is quoted as follows:

(f) A prime contractor or any subcontractor shall be required to submit cost or pricing data under the circumstances listed below, and shall be required to certify that, to the best of his knowledge and belief, the cost or pricing data he submitted was accurate, complete and current:

1. Prior to the award of any negotiated prime contract under this title where the price is expected to exceed \$100,000;

2. Prior to the pricing of any contract change or modification for which the price adjustment is expected to exceed \$100,000, or such lesser amount as may be prescribed by the head of the agency;

3. Prior to the award of a subcontract at any tier, where the prime contractor and each higher tier subcontractor have been required to furnish such a certificate, if the price of such subcontract is expected to exceed \$100,000; or,

4. Prior to the pricing of any contract change or modification to a subcontract covered by (3) above, for which the price adjustment is expected to exceed \$100,000, or such lesser amount as may be prescribed by the head of the agency.

Any prime contract or change or modification thereto under which such certificate is required shall contain a provision that the price to the government, including profit or fee, shall be adjusted to exclude any significant sums by which it may be determined by the head of the agency that such price was increased because the contractor or any subcontractor required to furnish such a certificate, furnished cost or pricing data which, as of a date agreed upon between the parties (which date shall be as close to the date of agreement on the negotiated price as is practicable), was inaccurate, incomplete, or noncurrent . . .<sup>21</sup>

The restrictions contained in the above clauses are far-reaching because they do apply through several tiers of subcontractors and because they require a forecast of costs. As will be discussed in a later Chapter, subcontracting is not always a clear-cut procedure. Prime contractors

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<sup>21</sup>Ibid.



or higher tier subcontractors, at the time of contract negotiation, may not be aware of the costing practices of certain companies with which they may later have to do business. As a result, it is not too difficult to incorrectly estimate those costs. Increases in the cost of production is another factor prominent in this problem. There are times when forecasting increased prices due to rising labor and/or material costs can be little more than educated guessing. The penalty for guessing wrong can be severe!

### Departmental Regulations

The statutory regulations, discussed in the first part of this Chapter, are the basis for Defense Department policies related to procurement of goods and services. Within the framework established by those laws, the Department has developed its own regulations which are designed to implement and to clarify the basic laws, to promote effectiveness and efficiency in defense procurement, and to promote the national welfare. Collectively, those regulations are known as Armed Services Procurement Regulations (ASPR). This section will discuss some of those regulations which the Philadelphia DSA office considers to be of prime importance and others which have been evaluated by Philadelphia area prime contractors and which are discussed further in Chapter V.

The Defense Supply Agency recommended for consideration in this study the sections of ASPR concerning small





businesses, foreign purchases, and labor surplus areas.<sup>22</sup>

The first two of those are discussed above. ASPR, in those instances, reiterate the statutory regulations.

The basic document authorizing a surplus labor area set-aside program is Defense Manpower Policy Number 4 (DMP-4).<sup>23</sup> Its objective was to distribute the employment potential created by DOD expenditures to those areas afflicted with a chronic or higher than normal unemployment rate. It provided for the payment of price differentials where necessary, in order to place procurement contracts in areas of labor surplus. Since 1954; however, an annual rider to the DOD Appropriation Act has eliminated the payment of price differentials made for the purpose of relieving economic dislocations. The Comptroller General of the United States, construed the rider to mean that any attempted set-aside of a total procurement exclusively for a surplus labor area was illegal because it might not result in the lowest possible price.<sup>24</sup> As of September, 1967, under DMP-4 as amended, only partial set-asides of a procurement are allowed, and there is the following further requirement:

Before a portion or portions constituting more

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<sup>22</sup>Personal letter from John V. Haggard, Public Affairs Officer, Defense Supply Agency, Philadelphia, Pennsylvania, Dated March 27, 1969.

<sup>23</sup>Defense Manpower Policy Number 4 (DMP-4), 17 F. R. 1195, February 7, 1952.

<sup>24</sup>U. S. Department of Commerce, Economic Development Administration, Report of the Independent Study Board on the Regional Effects of Government Procurement and Related Policies, (Washington, D. C.: Government Printing Office, 1967), p. 8.



than 50 per cent of the total requirement may be set-aside, a determination must be made that the action proposed will not result in the payment of a price differential.<sup>25</sup>

This requires a forecast on the part of procurement officers that firms in labor surplus areas will, in fact, offer the lowest prices on future bids. In view of this restriction, it may be significant that, while defense procurement expenditures rose from \$25 billion to \$33 billion from fiscal year 1964 to fiscal year 1966, awards to firms in labor surplus areas declined in amount from \$4.1 to \$3.2 billion and in proportion from 16 to 10 per cent.<sup>26</sup>

Other Defense Department regulations which, according to the procurement section of Headquarters Marine Corps, are commonly employed in defense contracts and which are contained in the Marine Corps Contract Clause Book are as follows:

ASPR 1-324

This regulation sets forth the general policy of the government in relation to warranty clauses. It requires that commercial warranties normally offered to non-defense buyers must be included in a contract.<sup>27</sup>

ASPR 2-201(a)(x11)a

This is a certification contained in bids or contracts over \$10,000 that the bidder or contractor does

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<sup>25</sup>Defense Manpower Policy.

<sup>26</sup>Regional Effects of Government Procurement.

<sup>27</sup>U. S. Department of the Navy, United States Marine Corps, Marine Corps Contract Clause Book, (1968), p. 99.



not and will not maintain or provide for his employees facilities which are segregated on a basis of race, creed, color, or national origin. Failure of the bidder or contractor to make this certification will result in the bid being rejected or the contract being void if the contract exceeds \$10,000 and is not otherwise exempted from the provisions of the Equal Opportunity Clause.<sup>28</sup>

#### Equal Opportunity Compliance Review

This clause must be inserted in invitations for bids for supplies where value is anticipated to be one million dollars or more. It states:

In accordance with regulations of the Office of Federal Contract Compliance (31 Fed. Reg. 6881), dated 3 May 1966, except as otherwise authorized, an award in amount (actual or estimated) of \$1,000,000 or more may not be made under this solicitation unless the bidder and each of his known first tier subcontractors (to whom he intends to award a subcontract of \$1,000,000 or more) are found on the basis of a compliance review, made within the six (6) month period next preceding the award, to be able to comply with the required equal opportunity provisions of this solicitation.<sup>29</sup>

#### ASPR 1-305.4(b)

This regulation is applied to bids or proposals when delivery by a particular time is necessary to meet the government's requirements. Under this circumstance, the contracting agency will include in the request for bids or proposals a delivery schedule by item number, quantity, and date. If a bid or proposal contains no other delivery schedule it may be accepted and the required delivery schedule will apply. A bid or proposal may contain an

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<sup>28</sup>Ibid., p. 1.

<sup>29</sup>Ibid., p. 158.



earlier delivery schedule. In that case, the government reserves the right to award the contract in accordance with either the required schedule or the proposed schedule. A subsection of this ASPR provides for a calendar date delivery schedule to begin a specified number of days after the award of a contract.<sup>30</sup>

ASPR Appendix "E" - E-504.4

This regulation simply provides that the need for progress payments conforming to regulations will not be considered as a handicap or adverse factor in the award of contracts. It is used in requests for bids or proposals when progress payments are contemplated. In cases where such payment is not contemplated, a warning that bids or proposals requesting progress payments will be rejected as nonresponsive will be included in invitations for bids or proposals.<sup>31</sup>

ASPR 7-205.7(c)

This regulation is applicable in cost-reimbursement type contracts under which work stoppage may be required for reasons such as advancements as in the state of the art, production or engineering breakthroughs, or realignment of programs. It reads in part as follows:

the Contracting Officer may at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of ninety (90) days after the order is delivered to the Contractor, and for any further period to which the parties may agree. Any such order shall be specifically identified as a Stop Work Order issued pursuant to this clause.<sup>32</sup>

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<sup>30</sup>Ibid., p. 32.

<sup>31</sup>Ibid., p. 94.

<sup>32</sup>Ibid., p. 96.





The remainder of the regulation requires the contractor to minimize costs associated with the particular contract upon receipt of such an order and resume work if the order is cancelled. It requires the contracting officer to either cancel the order or terminate the work covered by the order within ninety days of the issuance of the order. It further allows for adjustments in the delivery schedule, the estimated cost, the fee, or a combination thereof, and in any other provisions of the contract that may be affected.<sup>33</sup>

#### ASPR 14-305

This regulation provides that the inspection of the supplies or services to be furnished under a particular contract will be made by the cognizant DCAS representative at the point of origin.<sup>34</sup>

#### ASPR 3-807.3

This regulation requires that cost or pricing data submitted by a potential contractor be certified to be accurate, complete, and current. Such a certification, under the provisions of Public Law 87-653, may be used to set the maximum payment to be made for performance of a contract if the contracting agency determines that conditions warrant such action.<sup>35</sup>

#### Summary

The purpose of this Chapter is to provide a survey of the various influences that may be brought to bear on

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<sup>33</sup>Ibid.

<sup>34</sup>Ibid., p. 60.

<sup>35</sup>Ibid., p. 163.



companies and, in some cases, on communities through defense-related contracts. Some of the regulations discussed were designed to aid businesses. The Buy American Act, the providing of certificates of competency and the setting aside of portions of defense-related business for small businesses, and the allotting of scarce materials to contractors are examples of aid through regulations. Other regulations are more significant from a social viewpoint than from an industrial viewpoint. Examples of those are the surplus labor area set-aside program, and the requirements for companies which receive defense contracts to provide non-segregated facilities for employees and to grant equal employment opportunities to qualified applicants.

Many of the regulations discussed can only be imposed through a contract voluntarily entered into by a company with the government. Once the contract has been agreed upon, however, the company may find itself in the position of having Defense Department representatives on its premises inspecting and perhaps even controlling the work being performed under the contract. Not all of the regulations described are voluntarily agreed to. A case in point is the imposition of rated orders on a company. In effect, the government can order a company to perform a specific amount and type of work in order to meet national defense needs.



## CHAPTER IV

### ECONOMIC SURVEY OF DELAWARE VALLEY, PENNSYLVANIA

#### Geographical Description

The industrial and business complex known as Delaware Valley, USA, is a fourteen county area of Pennsylvania, Delaware, and New Jersey. Although the economy of the total area is interdependent, this study concentrates only on the Pennsylvania portion of the complex. That portion is composed of five counties located in the southeastern corner of the state: Bucks, Montgomery, Chester, Delaware, and Philadelphia (see Appendix I). The latter county encompasses the largest city in the state (the fifth largest in the nation), Philadelphia. The total land area of the five counties is 2,184 square miles - slightly less than 5 per cent of the total land area of Pennsylvania.<sup>36</sup>

The location of the area under study is favorable for industrial and business purposes and for growth. The eastern boundary is the Delaware River, which provides approximately 35 miles of deepwater access for shipping. Fifty miles down river from Marcus Hook, the southeastern

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<sup>36</sup>U. S. Department of Commerce, Bureau of the Census, County and City Data Book 1967: A Statistical Abstract Supplement, (1967), pp. 302-321.



corner of the area, the river empties into Delaware Bay, an important circumstance which will provide the area with terminals for larger types of ships which are being developed and which will not be able to navigate the river. Plans in this direction are already being developed by the Philadelphia Port Corporation and the Delaware River Port Authority. Ten major oil companies already are planning deepwater facilities in the lower Delaware Bay. Pipelines will probably carry oil to shore from these deepwater terminals.<sup>37</sup> Five bridges exist now and three more are planned to span the river and connect with the New Jersey Turnpike, which is almost parallel to the river and which provides easy access to New York, ninety miles to the northeast, Wilmington, just to the south of the area, and Washington, D. C., 175 miles south of Philadelphia.

Almost in the center of the area, on an east-west axis, is the Pennsylvania Turnpike. This highway, with its convenient access roads from every point in the area, provides an important connecting link for the businessmen and civic leaders with the state capitol at Harrisburg, ninety miles to the west, and with New York and Chicago. It is, of course, also important as a means of truck transportation.

The area is served by the Baltimore and Ohio and the Penn-Central railroads as well as several lesser roads. The New York to Washington rail corridor, with trains traveling up to 130 miles per hour, passes through the area

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<sup>37</sup>"Delaware Valley U.S.A.," Philadelphia Inquirer, October 29, 1968, pp. 14-18.





and provides an important complement to the nation-wide and international air transportation service available at Philadelphia International Airport.

### Population and Ethnic Groups

The total population of the area under study, based on the 1960 census, was 3,591,523, or almost one-third of the total population of the state. This comparison is reflected in the population density of 1,645 people per square mile as compared with an average for the state as a whole of 251 people per square mile. Density within the area, however, ranges from 277 in Chester County to 15,584 in Philadelphia County. A comparison of population characteristics by county is shown in percentages in Table 2.<sup>38</sup>

TABLE 2

#### POPULATION CHARACTERISTICS BY COUNTY (PER CENT)

<u>COUNTY</u>	<u>URBAN</u>	<u>NEGRO</u>	<u>FOREIGN STOCK</u> *	<u>AGE 65 OR OVER</u>
Bucks	75.3	1.8	19.8	6.1
Chester	43.8	8.2	13.6	8.6
Delaware	96.0	7.0	23.7	8.2
Montgomery	70.5	3.6	23.3	9.0
Philadelphia	100.0	26.4	29.1	10.4

\*predominantly Italian

### Financial Status

The aggregate income for the five counties studied,

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<sup>38</sup>County and City Data Book, pp. 302-321.



amounted to \$7,554 million in 1960. This represented 36 per cent of the aggregate state income. Table 3 shows the distribution of family incomes by county and for the state as a whole. The figures compare favorably with the United States median annual income of \$4600 per family and a United States average of 21.4 per cent of families earning less than \$3000 and 15.1 per cent of families earning over \$10,000.<sup>39</sup>

TABLE 3

## DISTRIBUTION OF FAMILY INCOMES

<u>COUNTY</u>	<u>MEDIAN</u>	<u>PER CENT UNDER</u> <u>\$3,000</u>	<u>PER CENT OVER</u> <u>\$3,000</u>
Bucks	\$6,782	8.3	19.0
Chester	6,604	11.8	22.3
Delaware	7,289	8.6	25.4
Montgomery	7,632	7.4	30.7
Philadelphia	5,782	17.1	14.2
Pennsylvania	5,719	16.8	13.9

During 1965, approximately 1,107,173 workers were employed in the area. Those employees earned slightly more than \$1.4 billion in taxable income.<sup>40</sup>

Major Industries

A report submitted to the Pennsylvania Governor's Economic Advisory Council by a state legislative subcommittee in September, 1967, listed six defense prime contractors in the Philadelphia area which had contracts in

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<sup>39</sup>Ibid.

<sup>40</sup>Ibid.



excess of \$10 million in each of nine plants.<sup>41</sup> Those were:

Philco Ford Washington Plant	\$10,232,000
Philco Philadelphia Plant	21,405,000
Philco Willow Grove Plant	16,885,000
General Electric King of Prussia Plant	26,534,000
General Electric Philadelphia Plant	102,843,000
Boeing Aircraft	414,652,000
Burroughs	32,165,000
Action Incorporated	14,404,000
Jos. Picards Construction Company	19,597,000

The above listed contractors reflect defense expenditures in Research and Development (R&D) as well as in the aero-space industry, electronics components and accessories, communications, electrical, computers, aircraft, and construction industries. Research for this study revealed, in addition to the above, a major industry in the area which does 85 per cent of the work in its Product Development Division either directly or indirectly for the Defense Department, an electronics laboratory which estimates that defense work is worth \$20 million annually to them, a steel mill which does about 19 per cent of its business directly with the Defense Department, and a construction company that does 30 per cent of its business either directly or indirectly with the Defense Department.

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<sup>41</sup>Defense Spending In Pennsylvania, A report submitted to the Pennsylvania Governor's Economic Advisory Council by a subcommittee composed of H. Tunny (chairman), A. Matamoras, and R. Moor, September, 1967.



Department of Defense installations, which are manufacturing in nature, are a significant part of the industrial sector of the Philadelphia area. They include the U. S. Naval Base, the Defense Personnel Support Center, the Frankford Arsenal, the Defense Industrial Supply Center, the Naval Air Development Center, and the Marine Corps Supply Activity. According to information obtained from the Greater Philadelphia Chamber of Commerce, those installations employed an average of 36,387 civilian workers during 1967.<sup>42</sup>

Manufacturing industries important in the area are those related to the processing and production of food, tobacco, textiles, apparel, lumber and wood, furniture and fixtures, paper and allied products, printing and publication, chemicals and allied products, petroleum, rubber and plastics, leather, stone, clay and glass, primary metals, fabricated metals, machinery, electric machinery, transportation equipment, and instruments.<sup>43</sup>

Important non-manufacturing industries and businesses in the area are agricultural production, forestry and fisheries, mining, new construction, maintenance and

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<sup>42</sup>Personal letter from Robert S. Barr, Director, Research and Publications Department, Greater Philadelphia Chamber of Commerce, February 21, 1969.

<sup>43</sup>Walter Isard and Thomas W. Langford, Jr., "Philadelphia Region Input-Output Study," Part III, Working papers for an unpublished study by the Regional Science Research Institute, Philadelphia, Pennsylvania, pp. 14-15.





repair construction, ordance, radio and television broadcasting, other communications, wholesale and retail trades, finance and insurance, real estate, hotels, personal and repair services, business services, research and development, automobile repairs and services, amusement and recreation, medical, educational, and nonprofit organizations.<sup>44</sup>

### Summary

The area under study is a densely populated section of Pennsylvania. One-third of the population of the state lives there on only 5 per cent of the state's land area. About 20 per cent of those people are decended from foreign stock - mostly Italian. There is also a significant negro representation in the population. Even under relatively crowded conditions, the average family income compares favorably with the rest of the nation.

Geographically, the area is favorably situated for commerce. It has easy access to the nation's capitol and to the major industrial and financial centers of the northeast section of the country as well as to foreign countries through its air and sea terminals.

Department of Defense installations provide some of the employment in the area and major defense contractors contribute significantly to the local economy. The area is by no means dependent on defense business. It has a wide variety of both manufacturing and non-manufacturing industries

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<sup>44</sup>Ibid.



which form a solid economic base which is not subject to the fluctuations often caused by expansions and reductions in defense expenditures.



## CHAPTER V

### EFFECTS OF DEFENSE EXPENDITURES IN DELAWARE VALLEY

#### Monetary Value of Defense Contracts

A major problem encountered in this study was that of finding expenditure figures that were limited to the area under investigation. While such records are available in the Pentagon, they are considered to be privileged and are not released to the public. Figures are available concerning the level of expenditures for the state as a whole and also for the Philadelphia Metropolitan Statistical Area which, in addition to the five counties under study, includes three counties in New Jersey: Camden, Gloucester, and Burlington. Since it is impossible, without official cooperation, to estimate what per cent of the contracts the Philadelphia area receives in relation to its total Metropolitan Statistical Area, the figures of the whole area are presented in Table 4. They are significant because they indicate the types of industries affected by DOD expenditures. Total figures for the State of Pennsylvania are presented in Table 5. They are indicative of defense expenditures in the Philadelphia area because it is known that the area receives



TABLE 4

Value of Shipments Made by Firms in the  
Philadelphia Metropolitan Statistical  
Area in Fulfillment of Department of  
Defense Contracts in 1965 (millions of \$)

Turbines, construction machinery, machine tools, computers, and related products	228.6
Communication equipment	386.5
Electronic components and accessories	55.9
Aerospace	200.0 to 499.9
Ship building, ship repair, ordance	143.7
Scientific instruments, mechanical measuring devices, optical instruments, and photographic equipment	206.5
Surgical and dental equipment, ophthalmic goods, watches and watch cases	23.3
Other machinery	263.0
Electronic transmission and industrial apparatus, wiring devices, miscellaneous electrical equipment	297.1
Selected fabricated metal products	211.8
Truck bodies and trailers	50.0 to 99.9
Selected chemicals and allied products	91.9
Petroleum refineries	1230.7
Fabricated rubber products	59.0
Selected primary metal industries	124.5

SOURCE: U. S. Department of Commerce, Shipments of Defense-Oriented Industries, 1965, (Washington, D. C.: Department of Commerce, 1967), pp. 26-27.





TABLE 5

Net Value of Military Prime Contract Awards  
Of \$10,000 or More in Pennsylvania During  
FY 1968

Airframes and related assemblies and spares	306,446
Aircraft engines and related spares	9,394
Other aircraft equipment and supplies	70,363
Missile and space systems	202,640
Ships	130,534
Combat vehicles	18,280
Non-combat vehicles	40,340
Weapons	37,595
Ammunition	405,072
Electronics and communication equipment	144,192
Petroleum	51,271
Other fuels and lubricants	2,494
Separately procured containers and handling equipment	443
Textiles, clothing and equipage	30,030
Military building supplies	6,426
Subsistence	19,997
Transportation equipment	195
Production equipment	8,602
Construction	17,526
Construction equipment	6,028
Medical and dental supplies and equipment	23,818
Photographic equipment and supplies	789
Materials handling equipment	4,789
All other supplies and equipment	97,393
Services	92,657
TOTAL	\$1,727,314



In addition to the prime contracts awards listed in Tables 4 and 5, Pennsylvania received over \$238 million in contract awards for research, development, test and evaluation work during fiscal year 1968. Those contracts went to business firms, educational institutions, and other non-profit businesses.<sup>45</sup>

Although not technically considered to be prime contractors, Department of Defense installations in Philadelphia are important contributors to the economy of the area. During fiscal year 1965, payrolls at those installations amounted to \$158,143,000. Materials, supplies, and parts used by them amounted to \$42,234,000, and contractual services and other costs amounted to \$29,419,000.<sup>46</sup>

Effects of Defense Expenditures on the  
Economy of the Area

Individuals employed directly in the production of defense goods tend to spend their incomes in the area where production takes place. Those expenditures give rise to more employment in the area, both in services and manufacturing. When large defense contracts are let in an area and employment is; thereby, increased, retail merchants experience an increase in business, expand their stock, and hire more clerks; mobilizing to serve a greater demand.

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<sup>45</sup>U. S. Department of Commerce, Shipments of Defense-Oriented Industries, 1965, (Washington D. C.: Department of Commerce, 1967), p. 64.

<sup>46</sup>Ibid., p. 68.



Public facilities may also have to be developed to meet the requirements of the new or expanded plants and perhaps to meet the needs of new people moving into the area to fill an increased demand for labor. New housing and new business establishments may be built for the same reasons. Thus, we have some multiplier effect on employment opportunities and on dollar value related to defense expenditures.

An accurate measurement of the total local effects of defense expenditures is not possible without an estimate of an area's multipliers. Research in the preparation of this paper; however, has only uncovered one defense related set of multipliers for a metropolitan area - Portsmouth, New Hampshire. In general, rudimentary technology and the lack of local data basis preclude accurate calculations of such statistics. Even considering the fact that an overall defense-related employment and a monetary multiplier exist for the nation, there is still a problem of applying them to the Philadelphia area.

The population of a particular area is one factor which affects the value of a multiplier. Typically, the larger the population, the larger the multiplier; because, a wider range of goods and services can be supported in the area and more turnover of dollars can be expected. In Chapter IV, it was stated that the Philadelphia area contained almost one-third of the population of the state in less than 5 per cent of the total area of the state. This indicates that the multiplier effects in that area may be



considerably higher than for the state as a whole and for many other areas of the nation. It is impossible to develop multipliers for that area alone; however, without better information than what is presently available. Keeping in mind those limitations and applying the nation-wide defense-related multipliers of between 2 and 3 for employment and 1.85 for dollar value to the figures in Chapter IV, and in Table 6 below, it is reasonable to assume that the Philadelphia area's employment situation is enhanced by at least 826,500 jobs and the economy boosted by at least \$7.4 billion because of defense expenditures in the area.<sup>47</sup>

TABLE 6

DEFENSE GENERATED EMPLOYMENT IN PENNSYLVANIA  
(JUNE, 1968)

Total civilian employment	157,000
At private plants	84,600
At DOD installations	72,400
Military personnel	16,600

SOURCE: "Economic and Resource Analysis,"  
Memo from the Office of the Assistant  
Secretary of Defense, unsigned and  
undated, p. 6.

Subcontracting of prime defense contracts in the area is another consideration in determining the economic value of defense expenditures. It should be reflected in the multipliers above; but, like those multipliers, little concrete evidence is available to scientifically establish

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<sup>47</sup>"Defense Spending in Pennsylvania," Pennsylvania Governor's Economic Advisory Council, Report of the Subcommittee, Harrisburg, Pennsylvania, 1968.





its value.

Much of the data is either unavailable or classified and little is known about second and third tier subcontracting. Even with published data, there is the problem of differentiating between commercial contract work and defense contract work. For example, since the same electronic components can go into missiles as well as business machines, many contractors actually do not know the final application of their products. Three estimates of subcontracting dollar value were developed while preparing this paper: 5 per cent, 12 per cent, and about 50 per cent of prime contracts. With a range like that, it appears that the value of subcontracting of defense work can not be measured until reporting procedures are improved and standardized. It seems obvious though that subcontracting is an important part of the contribution which defense expenditures make to any area.

The best yardstick of the economic value of defense expenditures was an estimated summary of defense generated employment for the state as a whole prepared by the Department of Defense from unpublished data gathered by the Department of Labor, Bureau of Employment Security. Like the other statistics related to this subject, it is far from perfect. First of all, it refers to the state as a whole and is not broken down below that level. In addition, the defense plant employment figures include those plants measured by the Economic Information Survey (EIS) and figures estimated



for all prime contractors not surveyed. Employment on all other subcontracts and that generated by lower tier suppliers is not included. It is estimated that plant employment, reflected in the figures in Table 6, represent about 50 per cent of total defense generated employment. Installation employment of civilian and military personnel are reflected accurately.

By dividing the total civilian employment, in Table 6, by the state's total work force, it is possible to obtain a percentage indication of the relative impact of defense expenditures (dependency ratio). The figure so obtained is 3.2 per cent. Military personnel were not included in arriving at the above percentages, because, they are not included in total work force data and the effects of their purchasing power acts differently on an area's multiplier than does that of civilians. Some unknown percentage of their salaries are spent on-post rather than in the civilian economic sector of the community.

Total civilian defense generated employment in prime contractor plants and military installations in the United States increased by 903,200 from June, 1965 to June, 1967. This represents an increase of 43.9 per cent since the beginning of the Vietnam war. From June, 1967 to June, 1968, employment has remained constant; however, its distribution among the states has varied.<sup>48</sup> A comparison of Pennsylvania work forces and dependency ratios for June, 1965

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<sup>48</sup>Ibid., p. 1.



and June, 1967, shows that the work force increased by 1 per cent and the dependency ration by .9 per cent.<sup>49</sup> Of the various programs that were expanded during that period, the buildup in ships, ammunition, and textiles had significant local effects (Table 7). Since the local effects are closely related to the types of products which are demanded during a buildup, and since the Philadelphia area is a large producer in the above three programs, it appears reasonable to assume that a large part of the increased defense employment in Pennsylvania was, in fact, in the Philadelphia area. Other programs shown in Table 7, while not reflecting such a dramatic increase in employment as the three discussed above, are important in the Philadelphia area.

The size and flexibility of the labor market in an area are other important factors in assessing the economic effects of defense expenditures in that area. If a contract is let to a firm in an area, or if an established corporation builds a new plant there in order to better complete a defense contract, the defense dependent work force is increased. The new employees may come from the ranks of the unemployed or from other jobs either within or outside the area. The resulting effect on the local economy may be very different in each of those three cases. Employing persons from outside the area creates new demands for housing, consumer goods, and public services. Recruiting labor from the ranks of the

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<sup>49</sup>Ibid., p. 9.



TABLE 7

CHANGE IN DIRECT EMPLOYMENT GENERATED BY  
PRIME DEFENSE CONTRACTS, BY PROGRAM  
(IN THOUSANDS)

<u>Program</u>	<u>Employment</u> <u>June, 65</u>	<u>Employment</u> <u>Dec., 66</u>	<u>Increase as</u> <u>per cent of</u> <u>June, 1965</u> <u>Employment</u>
Total	1114.7	1678.8	50.6
Aircraft	289.4	380.0	31.3
Missiles and Space	131.1	153.2	16.8
Ships	71.1	81.7	14.9
Vehicles and Weapons	31.6	59.5	88.3
Ammunition	49.0	171.2	249.4
Communications and Electronics	255.4	335.9	31.5
Miscellaneous Hard Goods	44.6	126.4	183.4
RDTE	56.3	64.1	13.8
Construction	48.0	52.8	10.0
Miscellaneous Services	30.3	45.0	48.5
Transportation	52.5	78.7	49.9
Petroleum Fuels and Containers	7.9	8.4	6.3
Textiles	31.6	95.9	203.5
Subsistence	15.9	26.0	63.5

SOURCE: Roger F. Fiefler and Paul B. Downing, "Regional Effect of Defense Effort on Employment," Monthly Labor Review, (July, 1968), p. 8.

unemployed may have some of the same effects; but, in addition, it may relieve some of the social burden on the community such as welfare payments and, at the same time, increase tax receipts. Hiring workers from other jobs may have the most far reaching effects of the three sources of labor. It will increase the income multiplier by the amount of increased income necessary to get the workers to change jobs. By bidding labor resources away from firms with long







term growth potential, defense related jobs may cause those firms to lose their long term competitive advantage because of increased labor costs.

An analysis of the Viewpoints of Philadelphia  
Area Businessmen Relative to the Effects  
of Defense Department Expenditures

The information contained in Table 8 was gathered by a questionnaire. It is a summary of the opinions of the sixteen area nondefense-oriented businessmen who returned informative responses. Two others replied; but, declined to provide any information. Except for the first three questions, which are, for the most part, applicable only to firms which do business or which are likely to do business with the Defense Department, the two types of companies polled generally agreed in their answers. The answers relating to the degree of community benefit from Department of Defense expenditures reflect the greatest variance between the two groups. That variance appears to be a matter of degree rather than conflicting viewpoints. All respondents agree that the community benefits from defense expenditures. One answer, from the manager of a company which does \$7 million per year in Defense Department business, was qualified by a note stating that, while the community at large benefits to some appreciable degree from defense expenditures, in the long run it is extremely doubtful if anyone benefits from them since the wealth and resources of the nation are being used for non-productive purposes. That was



TABLE 8

SUMMARY OF ANSWERS BY PHILADELPHIA AREA BUSINESS FIRMS  
TO A QUESTIONNAIRE CONCERNING THE EFFECTS OF  
DEPARTMENT OF DEFENSE EXPENDITURES

	<u>Firms With Possible Defense Contracting</u>	<u>Firms With Negligible Or No Defense Contracting</u>
Total number of replies giving information	8	8
Replies which declined to give information	1	1
Does the company do business either directly or indirectly with DOD?	5 - directly 3 - both	(not asked)
What per cent or dollar value per annum is DOD business worth to your company?	\$7M; \$20M; less than 3%; 10%; 30%; 85%	1 - 5% 1 - 8% 6 - no answer
Does your company benefit from small business set-asides?	8 - no	(not asked)
How much does the community benefit from DOD expenditures?	1 - to a small degree 6 - appreciable benefit 1 - to a large degree	1 - to a small degree 3 - appreciable benefit 4 - to a large degree



TABLE 8  
(continued)

In the event of DOD expenditure cutbacks, to what degree would the community be affected?	5 - small degree 3 - appreciably 1 - appreciably in the short term, to a small degree in the long run	4 - small degree 3 - appreciably 1 - appreciably in the short term, to a small degree in the long run
How much would a \$20B-\$30B cutback affect your company?	2 - no effect 5 - to a small degree 1 - an appreciable degree	5 - to a small degree 2 - an appreciable degree 1 - appreciably in the short term; to a small degree in the long run
Do DOD contract policies have any effects on the community?	1 - no 3 - yes - beneficial 4 - undetermined	1 - no 4 - yes - beneficial 1 - yes - detrimental 2 - undetermined
Are major prime defense contractors in the area more prone to respond to the interests of the state and local governments or to the interests of Washington?	4 - Washington 4 - divided interests	2 - Washington 1 - state and local 5 - divided interests



the most negative reply received. A major department store manager attributes much of the store's business to its location near a plant of a major prime defense contractor. The Research Director of another well known department store in the area feels that the economy of a community is boosted rather sharply in the immediate vicinity of specific plants which receive large defense contracts. The impact weakens the further away one gets from the central community in which the plant is located.

The Community Relations Manager of a division of one of the largest defense contractors in the nation did not complete the questionnaire because his company's local business was not defense-oriented. He did; however, volunteer his professional opinion as a businessman, who is quite familiar with the Delaware Valley Region, that the economic impact in the area is appreciable.

While the businessmen generally agree to an appreciable degree of benefit from Defense Department expenditures, they do not feel that a cutback in such expenditures will have the exact reciprocal effect. The general opinions expressed in the answers relating to the effects of such a cutback on the community and on the particular companies indicate that those effects will not be as great as the effects of any expansion of Defense Department expenditures. While at first this seems to be incongruous, there is reasoning behind the answers. This situation is discussed in more detail in Chapter VI.





The firms, whose answers are listed under the column "firms with possible defense contracting," are firms which were selected (along with 31 others which did not reply) as potential defense contractors based on the types of their products. They were not listed as such on any documents uncovered during this study. As can be seen from the answers, all but one attribute over 10 per cent of their income to defense business. Some of the companies (\$20 million and 85 per cent) should be classed as major prime defense contractors; although, they are not listed as such in the Pennsylvania Report on Defense Spending.<sup>50</sup> The two firms in the "negligible or on defense contracting" column which reported business resulting from defense expenditures were a large Savings and Loan Company (8 per cent) and a public utility which mostly serves residential customers (5 per cent). While by no means a scientific sample, the answers of those two companies which do business throughout the City of Philadelphia, reinforce the opinions stated above that there is some appreciable benefit to the economy of the area from defense expenditures.

The information contained in Table 9 was also obtained by questionnaire. It reflects the opinions of major prime defense contractors which are listed in Pennsylvania's Report on Defense Spending.<sup>51</sup> The questions asked in the questionnaire (and some of the questions asked in the questionnaire relative to Table 8) were designed to

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<sup>50</sup>Ibid.

<sup>51</sup>Ibid.



TABLE 9

SUMMARY OF ANSWERS BY PHILADELPHIA AREA PRIME CONTRACTORS  
(OVER \$10M PER YEAR IN CONTRACTS) TO A QUESTIONNAIRE  
CONCERNING THE EFFECTS OF STATUTORY AND  
DEPARTMENTAL CONTRACT REGULATIONS

	<u>EFFECTS ON A</u> <u>COMPANY</u>				<u>EFFECTS ON THE</u> <u>COMMUNITY</u>		
	beneficial	somewhat restrictive	very restrictive	not significant	beneficial	restrictive	not significant
Certification of non-segregated facilities		1		3	2		2
Renegotiation clause		1	1	2			
Rated orders	1			3			4
Required delivery time schedule		2		1 (1 all)			
On-site government inspections		3		1			
Requirement for a calendar day delivery schedule in a bid or offer			1	1 (1 all)			
Total maximum price clause		3			1	1	2
Uninvited progress payment conditions	1	1					2
Stop Work Orders (90 days)	1	2		4			4
Warranty of supplies/services		2	1	4			
Notice of labor surplus area set-aside		1	2	1	1	1	2
Equal opportunity compliance review		1	1	2	3		1

NOTE: Opinions were not requested in the "effects on community" sections which have no answers entered.



determine the effects of regulations related to defense contracting. Almost all the regulations are considered to be insignificant in their relations to the community. Those concerning segregation and equal opportunity are considered to be beneficial. The businesses, listed in Table 8, generally feel that there is some benefit to the community from Defense Department contracting policies. Perhaps the reason for the difference in opinions is inherent in the answers to the last question in Table 8. Only one respondent feels that major prime defense contractors are prone to respond to the interests of the local government vice Washington. This question was not asked of prime defense contractors and there is no further documentary evidence that supports a conclusion that prime defense contractors in the area are any less interested in the local area than any other business. If this condition does exist; however, they probably would not have the same feel for the effects on the community of Defense Department expenditures as their less defense-oriented counterparts.

In considering the effects of Defense Department regulations on the companies themselves (Table 9), it can be seen from the tabulation of answers that most regulations are generally considered to be insignificant. In all cases, except rated orders, at least one respondent feels that the regulations are restrictive. It is of interest to note that half of the respondents feel that labor surplus area set-asides are restrictive; yet, that program has not been



fully implemented since 1954, and has declined since 1964 to only 10 per cent of Defense Department procurement expenditures in 1966. The reason for the feeling on the part of major prime contractors that the program is restrictive in the face of its limited application could not be determined. Also unknown is the reason for the general feeling that a warranty of supplies and services is restrictive. The clause, discussed in Chapter III, simply provides for normal warranty extensions to the Defense Department as would be given to any other buyer.

Of more value to this study, than the answers reflected in Table 9, were the narrative answers to another question contained on the questionnaire concerning what law or contract regulation was considered to be the most restrictive. Although one respondent simply said, "the Annual Appropriation Act," three of the major contractors were more informative and agreed that Public Law 87-653 (discussed in Chapter III) was the most restrictive regulation concerning Defense Department contracts. One stated that it was impossible to comply fully with the requirements of the law.

The Manager of Contract Administration of another company was more explicit and stated, in effect, that the law was good in theory; but, impractical in application. The experience of his company showed that it was a practical impossibility to comply fully with the requirements because of the mass of detail required and, in most cases, the







insufficient time available to collect it. He felt that as the law and its regulations are applied, it is almost impossible for even the most conscientious contractor not to suffer a loss sooner or later. It appears that this law places an inequitable burden on the contractor. It has no effect on the community other than the employment effects which are felt through the awarding or withholding of contracts within a particular area.

### Summary

Large defense contracts do have an expanding effect on the economy of the area where the work on them is carried out. This expansion takes place through a multiplier effect on new jobs and on added buying power. In the Philadelphia area, the economic value of such contracts is substantial and is enhanced by the fact that no one or two industries have a monopoly on providing defense-related products. Goods purchased by the Defense Department in that area vary from aerospace products and helicopters to clothing and medical supplies.

In general, the businessmen in the area (defense contractors and non-defense contractors) agree that defense business is beneficial to the community and that most restrictions imposed through contract regulations are offset by the benefits received. The costing requirement of Public Law 87-653 is the only regulation which is generally disapproved of by defense contractors.



## CHAPTER VI

### OUTLOOK

#### Future Department of Defense Influence on Defense-related Industries

Present indications point towards more supervision and regulation of industry through defense contracts and an expanding field for such action. Two major innovations discussed below will bring these about: (1) wide use of the computer, and (2) a potential expansion of the sphere of the Defense Department into the field of social problems.

New methods of computer processing of information essential to procurement and contract management are now being evolved by the DOD.<sup>52</sup> Those new methods are made possible largely by the decreasing costs of computer capacity which is expected to make automated contract management economically feasible. As this situation develops, more information will be required from suppliers, and that information will be subject to more accurate analysis.

Recently, an increased emphasis on social programs

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<sup>52</sup>Paul J. Hyman, "The Future Impact of Computers on Defense Contract Management," Defense Supply Association Review, XLVIII, (September-October, 1968), p. 43.



has been proposed for the Department of Defense. On September 26, 1968, at a meeting of the National Security Industrial Association, the Secretary of Defense stated that the Defense Department had moral obligation to contribute to the social well being of the country. He singled out low-cost housing, more efficient hospital development, and better training and educating of adults. Mr. Clifford's proposals are, as of this writing, not policy. It remains to be seen what the current administration will have to say about Defense Department expansion into a predominantly civilian sector of the economy.

Will There Be a Cutback in Defense  
Department Expenditures?

There is a constant reference in the news media these days to reductions in defense-related expenditures. At the moment of this writing, the proposed Defense Department budget for fiscal year 1970 has been reduced by several billion dollars by the President. Of course, it is too soon to guess what the budget will finally look like when it comes out of Congress. The war in Vietnam continues and must be supported. It appears there are only three choices available to Congress in relation to that budget: reduce the budget and direct a cutback in Vietnam activity; approve the original Defense Department budget; or, approve part of the budget now and the remainder in supplementals. In any case, the money must be provided or hostilities reduced. What will be the economic impact if



hostilities are substantially reduced or if they cease? Will there be a major reduction in expenditures, or will they continue at the present level, or is there a middle road that will be followed?

Recently, officials of three major defense contracting firms stated that their plans for the future did not include the possibility of reductions in defense expenditures. An analysis of the article does indicate that the companies which were not worried about cutbacks were those producing sophisticated weapons systems and those involved in aero-space programs. The main assumption made in the article is that there will be more of a need for those systems after the Vietnam war as the United States strives to maintain its relative position with Russia in the cold war. The makers of uniforms, conventional ordnance, and the like could be expected to bear the brunt of the cutbacks.<sup>53</sup>

A statement in 1967 by the Assistant Secretary of Defense (Comptroller), Robert N. Anthony, to the Joint Economic Committee of Congress seems to support, at least in part, this line of reasoning. He stated:

I am sure you understand that it would be completely fallacious to subtract this \$21.8 billion (Vietnam costs) from the \$73.1 billion expenditures for 1968, and conclude that the post-hostilities budget of the Department of Defense will be \$51.3 billion. Obviously, future Department of Defense expenditures will be a function of development in requirements for our non-Vietnam programs. It is

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<sup>53</sup>Bernard D. Nossiter, "Arms Firms See Postwar Spurt," The Washington Post, December 8, 1968, p. A1.





impossible to predict now how these requirements will change.<sup>54</sup>

The Philadelphia Area businessmen seems to share the optimistic viewpoint that a cutback in defense expenditures will not be catastrophic. As can be seen in Table 8, of the sixteen companies which responded to the questionnaire, only three expect an appreciable effect on their companies in the long run. A steel company executive added to his answer that any slack caused by a slow down in defense expenditures will be picked up by other sectors of the economy. On the other hand, the research director of a department store stated, "Profound effects are liable to be felt in specific localities if there is a cutback."

The Director of Contract Administration of an electronics company expressed almost exactly the same outlook that is discussed in The Washington Post article.

His reply was:

The total DOD budget may be reduced by the amount you indicate (\$20-\$40 billion) upon cessation of hostilities, but this reduction will be reflected by lesser manpower requirements, food, clothing, ammunition, small-arms ordnance, and related logistic support items. Major procurement for missiles, aircraft, electronics, etc., which has suffered during the Vietnam hostilities, will probably be increased. Most of your defensive suppliers are in this latter business, either as a prime or subcontractor. Conclusion: Most defense-oriented companies would benefit from cessation of Vietnam hostilities with consequential reorientation of a more conventional

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<sup>54</sup>U. S. Congress, Joint Economic Committee, Economic Effect of Vietnam Spending, Hearings, 90th Congress, 1st Session, Volume I, p. 9.



defense budget.<sup>55</sup>

An article presented to the Joint Economic Committee of Congress in 1967, tends to support the idea that cutbacks in defense-related expenditures will not disrupt the economy of the Philadelphia area. In fact, it forecasts an increase in employment in the Pennsylvania-New Jersey region of .53 per cent after a 20 per cent cut in armament expenditures.<sup>56</sup> That increase is attributed to the effects of a national reorientation of work force and commodity production due to the changes made in defense expenditures. It puts the area, under study, on the beneficial side of what is probably a mixed blessing. If the resources freed by a reduction in defense expenditures are transferred to other uses, the reduction can serve a very useful purpose by allowing an increase in consumption for the populace. But, if the resources can not be easily transferred, disarmament will mean distress for those sectors which are dependent on defense production.<sup>57</sup>

In view of the above, the prospect of a major cutback in defense expenditures upon the cessation of

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<sup>55</sup>Reply from Albert Berger, Director of Contract Administration, American Electronic Laboratories, Inc., to a questionnaire concerning the effects of defense expenditures on the economy of the Philadelphia area.

<sup>56</sup>U. S. Congress, Joint Economic Committee, Economic Effect of Vietnam Spending, Hearings, 90th Congress, 1st Session, Volume II, p. 695.

<sup>57</sup>Roger E. Bolton, "Defense Spending: Burden or Prop?," Defense and Disarmament, (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1966), p. 1.



hostilities in Vietnam appears remote. A more likely approach seems to be a gradual reduction as depleted inventories are replaced and emphasis is changed from conventional warfare equipment to more sophisticated all-out-warfare weapons.<sup>58</sup> Such a change will not be without warning to the astute industrial and civic leaders. Changes in defense expenditures do not always represent the timing or extent of the impact of the changes in defense demand. Payments for goods are often not made until after much of the employment involved has taken place. The movement of purchases lags behind the movement of defense-related employment. Declining orders or contracts are important signals to firms. With proper analysis of such trends, firms may begin to reduce inventories and employment even while purchases or payments for items still being completed and delivered remain stable.<sup>59</sup>

A major consideration in a study of the effects of defense cutbacks in the Philadelphia area is that area's broad industrial base with no major type of industry dominating. It is not subject to economic fluctuations to the extent that other industrial areas are: for example, Detroit with the automobile industry and Southern California with the aircraft industry. A complete discription of that base is near impossible because of the vast scope of research involved; but, a study being performed by the Regional

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<sup>58</sup>Effects of Vietnam Spending, Vol. I., p. 8.

<sup>59</sup>"Defense Spending," p. 26.



Science Research Institute in Philadelphia, under a NASA grant, has been going on for four years. It is expected to be available in November, 1969. The study goes into the economic structure of the community in great detail.<sup>60</sup> It is in the form of an input-output model and includes 36 Federal Governmental sectors, 47 capital formation sectors, 1 personal consumption sector, 1 export trade sector, 1 column for unallocated demand. It also contains columns showing imports and total regional production by sector. The completed study should provide a valuable detailed economic analysis of the area.

Governmental Assistance Available to Aid the  
Community in Coping With the Effects of  
Defense Department Expenditures

Evidence of serious state or local concern about the economic effects of Department of Defense expenditures in the Philadelphia area was not uncovered. The Chambers of Commerce of the five counties involved in the study, the City of Philadelphia, and two County Industrial/Manufacturing Associations, indicated that they had no figures on the extent of defense expenditures in the area. The Chamber of Commerce of "Greater Philadelphia" could only provide the figures on the number of employees at Department of Defense installations in the area. Even that was incomplete when compared with other more reliable sources.

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<sup>60</sup>Walter Isard and Thomas W. Langford, Jr., "Philadelphia Region Input-Output Study," Working papers for an unpublished study, Regional Science Institute, Philadelphia, Pennsylvania, 1969.







The State of Pennsylvania does have a Governor's Economic Advisory Council which is supposed to be aware of all aspects of the economy. The report of a subcommittee of the Council; however, is little more than a paraphrase of Department of Commerce and Department of Defense publications.<sup>61</sup> All of its charts can be found in Federal Government publications in any fair sized library. In other words, the Council, or at least its subcommittee, appears to be doing little on its own to enhance the economy of the state.

The Federal Government, on the other hand, seems to have some realization of the potential problems involved. On October 20, 1964, the President ordered the Departments of Commerce and Labor and the Office of Economic Opportunity to establish a permanent task force, known as the President's Task Force on Community Assistance, to join with state and local officials and other community leaders in "immediate action programs" whenever large scale layoffs occur.

There are now many Federal Government programs to assist employees, communities, and companies in adjusting to economic change. The Federal-State Unemployment Insurance Program and the Federal-State Employment Service, under the cognizance of the Department of Labor, are two services available for immediate assistance. Loans or donations of surplus federal equipment and property by GSA for use in vocational education retraining is also available to communities.

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<sup>61</sup>"Defense Spending In Pennsylvania."



The Department of Defense Referral Activity, at Dayton, Ohio, is available for relocating government employees affected by defense expenditure reductions. In conjunction with this, the Defense Department guarantees another job opportunity to every permanent government employee whose job is abolished.<sup>62</sup>

The Federal Government also arranges, through a variety of mechanisms, for assistance to communities adversely affected by changes in defense and defense-related programs. An Office of Economic Adjustment was established in 1961, in the Office of the Secretary of Defense, to coordinate such assistance. The Advisory Committee in this Office consists of representatives of several federal agencies. Its function is to provide a coordinating mechanism for the efforts of the various federal agencies that can assist communities. The office encourages and assists local leadership to identify and exploit its resources for economic growth. It was designed primarily to offset the effects of the closing of defense installations.<sup>63</sup>

Another major aid to communities is urban planning assistance, available under section 701 of the Housing Act of 1954, to help communities prepare to deal with problems posed by defense cutbacks. Under this assistance program, grants can be made for up to two-thirds of the cost of

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<sup>62</sup>The Center for Strategic Studies, Economic Impact of the Vietnam War, Special Report Series, Number 5, (Washington, D. C.: Renaissance Editions, Inc., 1967), p. 33.

<sup>63</sup>Ibid., p. 38.



collecting and analyzing the basic data needed for economic planning, as part of comprehensive urban planning.

### Summary

A subject which is of mutual concern to businessmen, some politicians, and the general public is the effects on the economy of changes in defense expenditures when hostilities cease in Vietnam. The current trend of thought seems to be that, instead of large scale cutbacks in expenditures, a gradual change of emphasis from conventional warfare requirements to more sophisticated weapons and equipment will take place. The Philadelphia area, with a broad industrial base, will probably be able to make such a gradual transition without a major economic disruption.

The local governments, in the Philadelphia area and the State Government, appear to have done very little to predict what the effects of defense cutbacks will be. On the other hand, the Federal Government has evidenced a concern over the situation by establishing committees under both the President and Congress, and within various executive departments, to keep abreast of developments and to provide assistance to areas which might be affected by cutbacks if the need should arise.



## CHAPTER VII

### CONCLUSION

The documented information, including the opinions of Philadelphia area businessmen, contained in the preceding Chapters, indicates that there is a substantial amount of Defense Department expenditures involved in the economy of the Philadelphia area. The types of those expenditures range from aero-space research at the General Electric plant in Valley Forge, Pennsylvania, to subcontractors and suppliers who may not even be aware that they are contributing to the defense effort. Those industries which are substantially defense-oriented, and even some which are not, subject themselves to a certain amount of federal regulation by entering into contracts with the Defense Department or by subcontracting from prime defense contractors. In the Philadelphia area, those regulations do not really have much in the way of unanticipated or undesirable effects or even beneficial effects on the companies or the community. Part of the reason for this is the well diversified economy of the area. Another part is probably due to the ethnic makeup of the area which eliminates some of the frustrations of the racial problems which can confront contractors in other areas.





The Defense Department itself is well organized, through the Defense Supply Agency and the separate armed services, to administer contracts in full compliance with federal regulations and in cooperation with the industries involved. The effects of the expenditures connected with those contracts can be expected to vary from region to region whtoughout the country. Specifificially, the effects depend on what the Defense Department is demanding and what a community has to offer.

At the present time, the demand is for conventional warfare equipment. Upon cessation of hostilities in Vietnam, it can be expected that the emphasis will shift to production of more sophisticated weapons, but, on a gradual basis. The Philadelphia area is presently supplying both types of defense equipment and can be expected to weather the transition of emphasis from one to the other without a major economic disruption. In some other areas of the nation there will be setbacks in the economy as the emphasis on types of defense demands change. Those areas which are committed to the production of conventional armaments (such as the Lancaster area of Pennsylvania) may suffer severe economic repercussions unless preventive action is taken. Other areas involved in missile and advanced aircraft research and production may grow. Philadelphia has a balanced blend of these industries and; therefore, is faced with the lesser problem of a shift of employment from one industry to another.

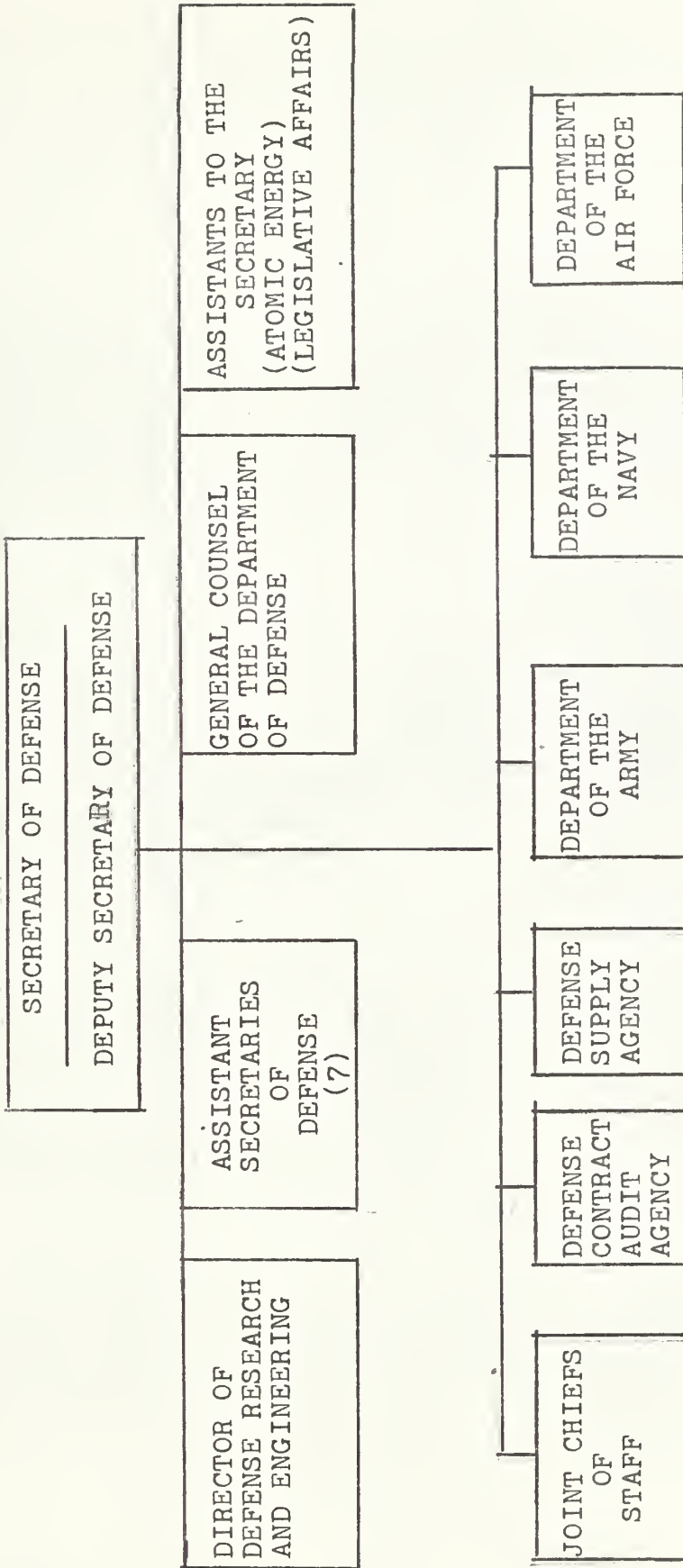


Overall, the Philadelphia area seems to be in a good position as far as defense expenditures go. It gains an appreciable amount of employment and purchasing power from those expenditures, and yet, it is in little danger of suffering a recession because of cutbacks.



APPENDIX I

POSITION OF THE DEFENSE SUPPLY AGENCY WITHIN THE DEPARTMENT OF DEFENSE

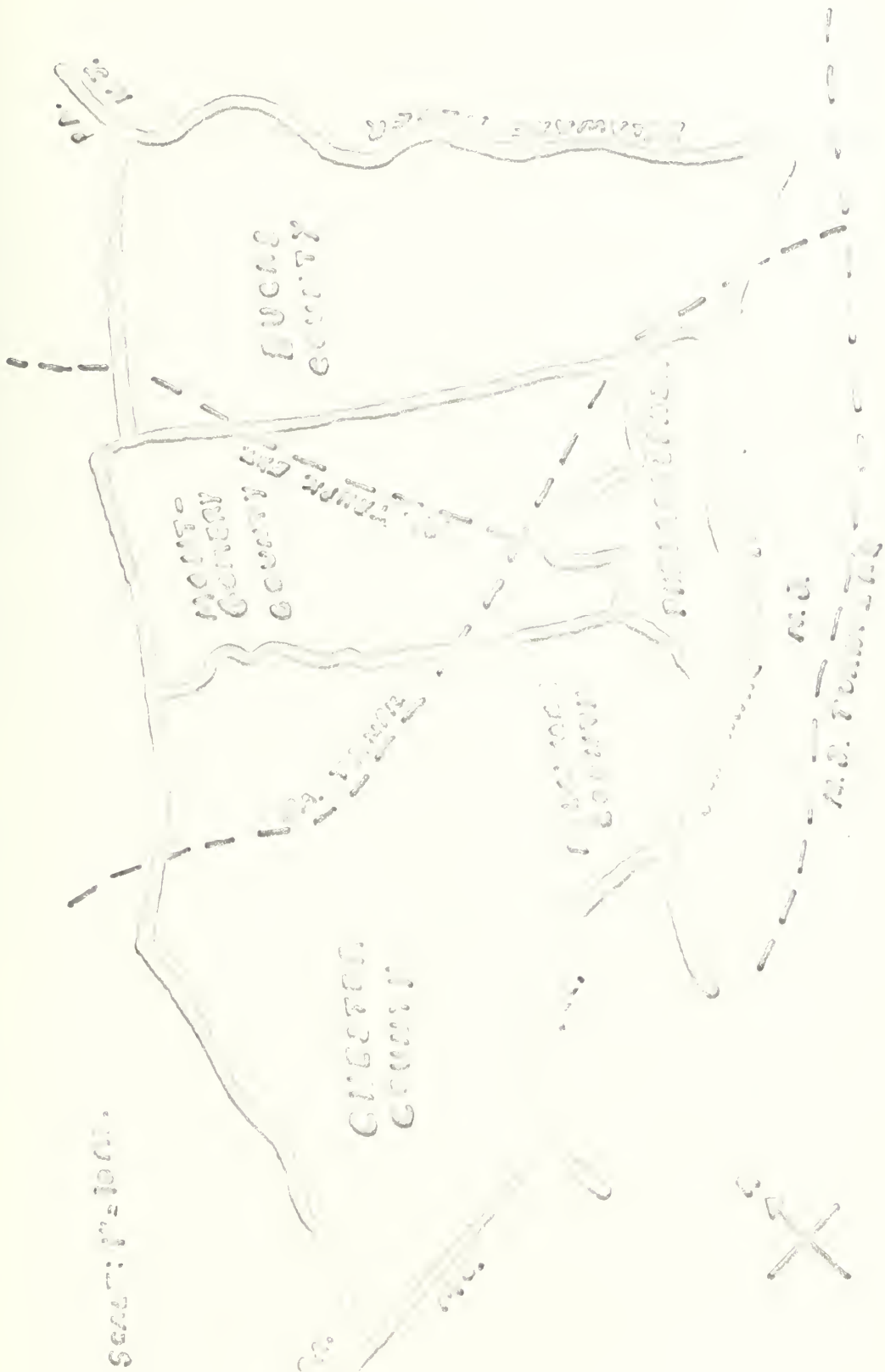


SOURCE: U. S. Government Organization Manual,  
(Washington, D. C.: Government  
Printing Office, 1968), p. 624.



# APPENDIX II

## MAP OF THE AREA STUDIED







### APPENDIX III

#### LETTER SENT TO PRIME DEFENSE CONTRACTORS

LTCol G. F. Gallagher  
83 Rockridge Court  
Woodbridge, Virginia 22191  
February 3, 1969

Gentlemen,

Because of a dual interest as a resident of the Philadelphia area and as a military officer, I have undertaken the task of writing a thesis on the subject of how spending by the Department of Defense influences the economic environment of a major industrial and business area of the nation (Philadelphia). This thesis is required in order to receive my MBA degree from the George Washington University, Washington, D. C., where I am enrolled in the Navy Graduate Financial Management Program.

Most of the facts which the thesis requires concerning prime defense contractors, such as your company, are available in various publications. In order to complete one particular chapter, however, there is a need to ascertain the opinions of such contractors with regards to certain clauses which may be included in contracts or requests for bids.

In order to accomplish the task, I would like to solicit your help by requesting you to complete and return the enclosed questionnaire. I do recognize that your time is valuable. With that in mind, and because of the standard nature of the clauses and the experience of your company with the Defense Department, only the basic title of each clause is contained in the questionnaire.

In view of the fact that there are only six prime contractors of the caliber of your company in the Philadelphia area and only fifteen in the entire state, the return of the questionnaire is most important to the study. Your cooperation is earnestly requested.

Sincerely yours,

G. F. Gallagher



## APPENDIX IV

### QUESTIONNAIRE SENT TO PRIME DEFENSE CONTRACTORS

LtCol G. F. Gallagher USMC  
83 Rockridge Court  
Woodridge, Virginia 22191

#### QUESTIONNAIRE INSTRUCTIONS

Choices 1 through 4 pertain to the company. Please check one for each item.

Choices 5 through 7 pertain to the community. Please check one where applicable.

#### CHOICES

1. Is beneficial to the company
2. Is somewhat restrictive to the company.
3. Is very restrictive to the company
4. Has no significant effect, either restrictive or beneficial, on the company.
5. Is beneficial to the community.
6. Is restrictive to the community.
7. Has no significant effect, either restrictive or beneficial, on the community.

#### QUESTIONNAIRE

	Choices	
	1-4	5-7
1. Certification of non-segregated facilities.	( )	( )
2. Renegotiation clause.	( )	( )
3. Rated orders under the Defense Production Act.	( )	( )
4. Required delivery time schedule.	( )	( )
5. On-site government inspections.	( )	( )
6. Requirement for a calendar day delivery schedule in a bid or offer.	( )	( )
7. Total maximum price clause.	( )	( )
8. Uninvited progress payment conditions.	( )	( )
9. Stop work orders (90 days).	( )	( )



- |   |     |     |
|---|-----|-----|
|   | 1-4 | 5-7 |
| 10. Warranty of supplies/services.  | ( ) | ( ) |
| 11. Notice of labor surplus area set-aside.   | ( ) | ( ) |
| 12. Equal opportunity compliance review.  | ( ) | ( ) |
| 13. In doing business with the Department of Defense, what law or contract regulation does your company consider to be the most restrictive to the economic welfare of the company and/or the community? Why? |     |     |



## APPENDIX V

### LETTER SENT TO PROBABLE DEFENSE CONTRACTORS

LtCol G. F. Gallagher  
83 Rockridge Court  
Woodbridge, Virginia 22191  
February 5, 1969

Gentlemen,

Because of a dual interest as a resident of the Philadelphia area and as a military officer I have undertaken the task of writing a thesis on the subject of how spending by the Department of Defense influences the economic environment of a major industrial and business area of the nation (Philadelphia). This thesis is required in order to receive my MBA degree from the George Washington University, Washington, D. C., where I am enrolled in the Navy Graduate Financial Management Program.

Considering the type of business which you do, it is possible that you deal, either directly or indirectly, with the Defense Department. Two of the points which I am trying to determine in this study are: how much of what is considered normal commercial business is in some way responsive to Defense Department buying, and whether or not the Philadelphia business man feels that defense spending has a measurable effect on the local economy. Some significant facts point to the probability that such a relationship does exist.

The State of Pennsylvania ranks fourth in civilian defense related employment. Salaries in the top five defense related industries in the state amounted to \$600 million in fiscal year 1967. In addition, large increases in defense buying of non-military type hardware and in R&D work have taken place recently. As examples, the Defense Department spent \$21.6 million in Pennsylvania in fiscal year 1967 on medical and dental equipment and \$257.3 million in R&D contracts.

With a defense related employee multiplier of between two and three, and a dollar multiplier of 1.85, a great many jobs are created and much buying power evolves, either directly or indirectly, from defense spending. Since firms in the Philadelphia area consistently get above sixty per cent of the state's prime defense contracts, there must be some ramifications in the local economy.





Your assistance in obtaining a cross section of informed local opinion by completing and returning the enclosed questionnaire is respectfully requested. Since only about forty firms of your caliber exist in that area of Pennsylvania, each questionnaire is very important to the study. I realize that your time is valuable and therefore have designed a questionnaire which will get to the point quickly and clearly and, hopefully, at a minimum inconvenience to you.

Sincerely yours,

G. F. Gallagher



## APPENDIX VI

### LETTER SENT TO NON-DEFENSE-RELATED BUSINESSES

LtCol G. F. Gallagher  
83 Rockridge Court  
Woodbridge, Virginia 22191  
February 5, 1969

Gentlemen,

Because of a dual interest as a resident of the Philadelphia area and as a military officer, I have undertaken the task of writing a thesis on the subject of how spending by the Department of Defense influences the economic environment of a major industrial and business area of the nation (Philadelphia). This thesis is required in order to receive my MBA degree from the George Washington University, Washington, D. C., where I am enrolled in the Navy Graduate Financial Management Program.

Your company obviously is not in the defense contract field, and this is precisely the reason that I am requesting your assistance. One of the points which I am trying to determine is whether or not the Philadelphia businessman feels that defense contracting in the area has any direct or indirect influence on his business. Some significant facts point to the probability that such a relationship does exist.

The State of Pennsylvania ranks fourth in civilian defense related employment. In fact, about 48,000 civilians are employed directly by the Defense Department in Philadelphia. Salaries in the five top defense related industries in the state amounted to \$600 million in fiscal year 1967. With a defense related employee multiplier of between two and three, and a dollar multiplier of 1.85, a great many jobs are created and much buying power evolves, either directly or indirectly, from defense spending. Since firms in the Philadelphia area consistently get above sixty per cent of the state's defense prime contracts, there must be some ramifications in the local economy.



Your assistance in obtaining a cross-section of informal local opinion by completing and returning the enclosed questionnaire is respectfully requested. Since only about fifty companies of your caliber exist in the Delaware Valley (Pennsylvania) area, each one is very important to this study. I realize that your time is valuable and have therefore included only a few questions which will supply me with the basic information which I need.

Sincerely yours,

G. F. Gallagher



## APPENDIX VIII

### QUESTIONNAIRE SENT TO PROBABLE DEFENSE CONTRACTORS AND TO NON-DEFENSE-RELATED BUSINESSES

#### QUESTIONNAIRE

NOTE: This questionnaire is designed to serve several types of companies. If a question obviously does not pertain to your company, it is crossed out for your convenience. Please give an answer for each of the first eight questions and add any comment which you deem appropriate in the space provided in nine.

1. Does your company do any business, either directly or indirectly with the Defense Department?  
☐ yes - directly  
☐ yes - indirectly  
☐ no
2. What per cent of business or dollar value per annum do you estimate that defense spending is worth to your company, either directly or indirectly?  
  

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3. Does your company benefit in any way from the Defense Department policy of small business set-asides?  
☐ yes  
☐ no
4. As a business man, how much do you feel that the community at large benefits from defense spending?  
☐ none  
☐ to a small degree  
☐ some appreciable benefit  
☐ to a large degree
5. Some economists estimate that defense spending will be reduced by 20-30 billion dollars after a cease fire in Vietnam. How much do you feel that this will affect the community?  
☐ none  
☐ to a small degree  
☐ to an appreciable degree  
☐ to a large degree





6. How much do you feel that such a cutback will affect your company?
- ☐ none
  - ☐ to a small degree
  - ☐ to an appreciable degree
  - ☐ to a large degree
7. Do you think that Defense Department policies, such as setting aside certain size contracts for small businesses and equal opportunity in employment clauses, have any effect on the community?
- ☐ no
  - ☐ yes - beneficial
  - ☐ yes - detrimental
  - ☐ undetermined
8. There are six major defense prime contractors in the Philadelphia area (over ten million per year each in contracts): Do you think that such companies are more prone to respond to the interests of Washington than to the state and local area?
- ☐ Washington
  - ☐ state and local
  - ☐ divided
9. Please include any comments which may pertain to your answers above or to the question of defense spending and its effects on the economy of the Philadelphia area in general.



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